



PATENTS  
ALT-255

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicant : Gregory Starr  
Application No. : 10/655,853 Confirmation No. : 7257  
Filed : September 5, 2003  
For : DUAL-GAIN CIRCUITRY  
FOR PROGRAMMABLE LOGIC DEVICE  
Group Art Unit : 2816

New York, New York 10020  
January 5, 2004

Hon. Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, applicant hereby makes the following patents and publications of record in the above-identified patent application:

Graham et al. U.S. Patent Re. 35,797 (May 19, 1998)  
Wahlstrom U.S. Patent 3,473,160 (October 14, 1969)  
Bell et al. U.S. Patent 4,494,021 (January 15,  
1985)  
Shaw U.S. Patent 4,633,488 (December 30, 1986)  
Threewitt et al. U.S. Patent 4,719,593 (January 12,  
1988)  
Tateishi U.S. Patent 4,857,866 (August 15, 1989)  
Popat et al. U.S. Patent 4,868,522 (September 19,  
1989)  
Podkowa et al. U.S. Patent 4,959,646 (September 25,  
1990)  
Graham et al. U.S. Patent 5,072,195 (December 10,  
1991)  
Shizukuishi et al. U.S. Patent 5,075,575  
(December 24, 1991)  
Ashby et al. U.S. Patent 5,079,519 (January 7,  
1992)  
Huang U.S. Patent 5,121,014 (June 9, 1992)  
Hotta et al. U.S. Patent 5,133,064 (July 21, 1992)

Graham et al. U.S. Patent 5,204,555 (April 20, 1993)  
 Kersh U.S. Patent 5,208,557 (May 4, 1993)  
 Norman et al. U.S. Patent 5,239,213 (August 24, 1993)  
 Wright et al. U.S. Patent 5,349,544 (September 20, 1994)  
 Kasturia U.S. Patent 5,394,116 (February 28, 1995)  
 West et al. U.S. Patent 5,397,943 (March 14, 1995)  
 Nakao U.S. Patent 5,418,499 (May 23, 1995)  
 Ishibashi U.S. Patent 5,420,544 (May 30, 1995)  
 Fukuda U.S. Patent 5,424,687 (June 13, 1995)  
 Meyer U.S. Patent 5,448,191 (September 5, 1995)  
 Huizer U.S. Patent 5,477,182 (December 19, 1995)  
 Chiang U.S. Patent 5,506,878 (April 9, 1996)  
 Hotta et al. U.S. Patent 5,542,083 (July 30, 1996)  
 Iga U.S. Patent 5,581,214 (December 3, 1996)  
 Mizuno U.S. Patent 5,629,651 (May 13, 1997)  
 Jefferson U.S. Patent 5,642,082 (June 24, 1997)  
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 Jefferson et al. U.S. Patent 5,963,069 (October 5, 1999)  
 Li U.S. Patent 5,970,110 (October 19, 1999)  
 Wang et al. U.S. Patent 5,974,105 (October 26, 1999)  
 Smith U.S. Patent 5,987,543 (November 16, 1999)  
 New U.S. Patent 5,999,025 (December 7, 1999)  
 Talaga, Jr., et al. U.S. Patent 6,014,048 (January 11, 2000)  
 Albu et al. U.S. Patent 6,043,677 (March 28, 2000)  
 Miller, Jr., et al. U.S. Patent 6,069,506 (May 30, 2000)  
 Shen et al. U.S. Patent 6,069,507 (May 30, 2000)  
 Embree U.S. Patent 6,104,222 (August 15, 2000)  
 Huang et al. U.S. Patent 6,114,915 (September 5, 2000)  
 Linebarger et al. U.S. Patent 6,141,394 (October 31, 2000)

Jeong et al. U.S. Patent 6,144,242 (November 7, 2000)  
Tsai et al. U.S. Patent 6,157,266 (December 5, 2000)  
Wu et al. U.S. Patent 6,249,189 (June 19, 2001)  
Sung et al. U.S. Patent 6,252,419 (June 26, 2001)  
Nelson et al. U.S. Patent 6,278,332 (August 21, 2001)  
Friedberg et al. U.S. Patent 6,320,469 (November 20, 2001)  
Sung et al. U.S. Patent 6,373,278 (April 16, 2002)  
Williams U.S. Patent 6,411,150 (June 25, 2002)  
Horan et al. U.S. Patent 6,462,623 (October 8, 2002)  
Sung et al. U.S. Patent 6,483,886 (November 19, 2002)  
Aung et al. U.S. Patent Application Publication No. 2001/0033188 A1 (October 25, 2001)  
Europe 0 266 065 (May 4, 1988)  
Europe 0 416 930 (March 13, 1991)  
Europe 0 778 517 (June 11, 1997)  
Europe 0 987 822 (March 22, 2000)  
Europe 1 056 207 (November 29, 2000)  
Japan 1-137646 (May 30, 1989)  
Japan Patent Abstract No. 10,215,156 (August 11, 1998)

Advanced Micro Devices, Inc., "Am2971 Programmable Event Generator (PEG)," Publication No. 05280, Rev. C, Amendment /0, pp. 4-286 - 4-303 (July 1986)

Advanced Micro Devices, Inc., "AmPAL\*22S8 20-Pin IMOX PAL-Based Sequencer," Publication No. 06207, Rev. B, Amendment /0, pp. 4-102 - 4-121 (October 1986)

Agere Systems, Inc., "ORCA ORT82G5 0.622/1.0-1.25/2.0-2.5/3.125 Gbits/s Backplane Interface FPSC," Preliminary Data Sheet, pp. 1-35 (July 2001)

Agere Systems, Inc., "ORCA ORT8850 Field-Programmable System Chip (FPSC) Eight Channel x 850 Mbits/s Backplane Transceiver," Product Brief, pp. 1-6 (July 2001)

Agere Systems, Inc., "ORCA ORT8850 Field-Programmable System Chip (FPSC) Eight Channel x 850 Mbits/s Backplane Transceiver," Product Brief, pp. 1-36 (August 2001)

DynaChip Corp., "Application Note: Using Phase Locked Loops in DL6035 Devices" (1998)

DynaChip Corp., DY6000 Family Datasheet  
(December 1998)

Ko, U., et al., "A 30-ps Jitter, 3.6  $\mu$ s Locking, 3.3-Volt Digital PLL for CMOS Gate Arrays," Proceedings of the IEEE 1993 Custom Integrated Circuits Conference, Publication No. 0-7803-0826-3/93, pp. 23.3.1-23.3.4 (May 9-12, 1993)

LSI Logic Corp., 500K Technology Design Manual (Document DB04-000062-00, First Edition), pp. 8-1 - 8-33 (December 1996)

Lucent Technologies, Inc., "Optimized Reconfigurable Cell Array (ORCA) OR3Cxxx/OR3Txxx Series Field-Programmable Gate Arrays," Preliminary Product Brief, (November 1997)

Lucent Technologies, Inc., "ORCA<sup>®</sup> Series 3 Field-Programmable Gate Arrays," Preliminary Data Sheet, Rev. 01 (August 1998)

Monolithic Memories, Inc., "Programmable Array Logic PAL20RA10-20 Advance Information," pp. 5-95 - 5-102 (January 1988)

National Semiconductor Corp., LVDS Owner's Manual & Design Guide (April 25, 1997)

National Semiconductor Corp., "DS90CR285/DS90CR286 +3.3V Rising Edge Data Strobe LVDS 28-Bit Channel Link-66 MHZ" (March 1998)

Xilinx, Inc., "Virtex 2.5V Field Programmable Gate Arrays Advance Product Specification (Version 1.0)" (October 20, 1998)

Xilinx, Inc., "Application Note: Using the Virtex Delay-Locked Loop (Version 1.31)" (October 21, 1998)

Zaks, R., et al., From Chips to Systems: An Introduction to Microcomputers, pp. 54-61 (Prentice-Hall, Inc., Englewood Cliffs, N.J., 1987)

Copies of the aforementioned publications, which are listed on the accompanying Form PTO-1449 (submitted in duplicate), are enclosed herewith.

It is respectfully requested that these publications be (1) fully considered by the Patent and Trademark Office during examination of this application; and (2) printed on any patent which may issue on this application. Applicant requests that a copy of Form PTO-

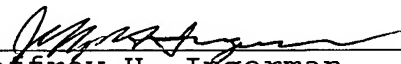


1449, as considered and initialled by the Examiner, be returned with the next communication.

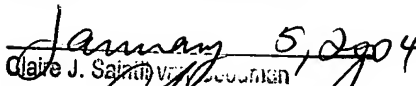
It is respectfully requested that these applications be fully considered by the Patent and Trademark Office during the examination of the above-captioned patent application.

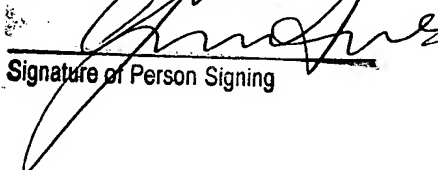
An early and favorable action is respectfully requested.

Respectfully submitted,

  
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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. AL-255	APPLN. NO. 10/655,853
	APPLICANT Gregory Starr	CONF. NO. 7257
	FILING DATE September 5, 2003	GROUP ART UNIT 2816

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	Re. 35,797	5/1998	Graham et al.	326	40	
	3,473,160	10/1969	Wahlstrom	326	41	
	4,494,021	1/1985	Bell et al.	307	591	
	4,633,488	12/1986	Shaw	375	120	
	4,719,593	1/1988	Threewitt et al.	364	900	
	4,857,866	8/1989	Tateishi	331	1A	
	4,868,522	9/1989	Popat et al.	331	2	
	4,959,646	9/1990	Podkowa et al.	340	825.83	
	5,072,195	12/1991	Graham et al.	331	2	
	5,075,575	12/1991	Shizukuishi et al.	307	465	
	5,079,519	1/1992	Ashby et al.	331	1A	

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	0 266 065	5/1988	European Pat. Off.				
	0 416 930	3/1991	European Pat. Off.				
	0 778 517	6/1997	European Pat. Off.				
	0 987 822	3/2000	European Pat. Off.				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
	Advanced Micro Devices, Inc., "Am2971 Programmable Event Generator (PEG)," Publication No. 05280, Rev. C, Amendment /0, pp. 4-286 - 4-303 (July 1986)
	Advanced Micro Devices, Inc., "AmPAL*22S8 20-Pin IMOX PAL-Based Sequencer," Publication No. 06207, Rev. B, Amendment /0, pp. 4-102 - 4-121 (October 1986)
	Agere Systems, Inc., "ORCA ORT82G5 0.622/1.0-1.25/2.0-2.5/3.125 Gbits/s Backplane Interface FPSC," Preliminary Data Sheet, pp. 1-35 (July 2001)
	Agere Systems, Inc., "ORCA 8850 Field-Programmable System Chip (FPSC) Eight Channel x 850 Mbits/s Backplane Transceiver," Product Brief, pp. 1-6 (July 2001)
	Agere Systems, Inc., "ORCA 8850 Field-Programmable System Chip (FPSC) Eight Channel x 850 Mbits/s Backplane Transceiver," Product Brief, pp. 1-36 (August 2001)

EXAMINER

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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-0449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. AL-255	APPLN. NO. 10/655,853
	APPLICANT Gregory Starr	CONF. NO. 7257
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## U.S. PATENT DOCUMENTS

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	5,121,014	6/1992	Huang	327	276	
	5,133,064	7/1992	Hotta et al.	395	550	
	5,204,555	4/1993	Graham et al.	307	465	
	5,208,557	5/1993	Kersh	331	57	
	5,239,213	8/1993	Norman et al.	326	38	
	5,349,544	9/1994	Wright et al.	364	600	
	5,394,116	2/1995	Kasturia	331	34	
	5,397,943	3/1995	West et al.	326	39	
	5,418,499	5/1995	Nakao	331	57	
	5,420,544	5/1995	Ishibashi	331	11	
	5,424,687	6/1995	Fukuda	331	11	

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	1 056 207	11/2000	European Pat. Off.				
	1-137646	5/1989	Japan				
	10,215,156	8/1998	Japan Pat. Abstract				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
	DynaChip Corp., "Application Note: Using Phase Locked Loops in DL6035 Devices" (1998)
	DynaChip Corp., DY6000 Family Datasheet (December 1998)
	Ko, U., et al., "A 30-ps Jitter, 3.6 $\mu$ s Locking, 3.3-Volt Digital PLL for CMOS Gate Arrays," <u>Proceedings of the IEEE 1993 Custom Integrated Circuits Conference</u> , Publication No. 0-7803-0826-3/93, pp. 23.3.1-23.3.4 (May 9-12, 1993)
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FORM PTO 449

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,448,191	9/1995	Meyer	327	105	
	5,477,182	12/1995	Huizer	327	261	
	5,506,878	4/1996	Chiang	377	39	
	5,542,083	7/1996	Hotta	709	400	
	5,581,214	12/1996	Iga	331	16	
	5,629,651	5/1997	Mizuno	331	34	
	5,642,082	6/1997	Jefferson	331	25	
	5,646,564	7/1997	Erickson et al.	327	158	
	5,656,959	8/1997	Chang et al.	327	105	
	5,691,669	11/1997	Tsai et al.	331	17	
	5,699,020	12/1997	Jefferson	331	17	

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	Monolithic Memories, Inc., "Programmable Array Logic PAL20RA10-20 Advance Information," pp. 5-95 - 5-102 (January 1988)
	National Semiconductor Corp., LVDS Owner's Manual & Design Guide (April 25, 1997)
	National Semiconductor Corp., "DS90CR285/DS90CR286 +3.3V Rising Edge Data Strobe LVDS 28-Bit Channel Link-66 MHZ," (March 1998)
	Xilinx, Inc., "Virtex 2.5V Field Programmable Gate Arrays Advance Product Specification (Version 1.0) (October 20, 1998)

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FORM PTO-144 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. AL-255	APPLN. NO. 10/655,853
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	5,742,180	4/1998	DeHon et al.	326	40	
	5,744,991	4/1998	Jefferson et al.	327	158	
	5,777,360	7/1998	Rostoker et al.	257	315	
	5,815,016	9/1998	Erickson	327	158	
	5,847,617	12/1998	Reddy et al.	331	57	
	5,889,436	3/1999	Yeung et al.	331	2	
	5,900,757	5/1999	Aggarwal et al.	327	198	
	5,952,891	9/1999	Boudry	331	57	
	5,963,069	10/1999	Jefferson et al.	327	158	
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	5,974,105	10/1999	Wang et al.	375	376	

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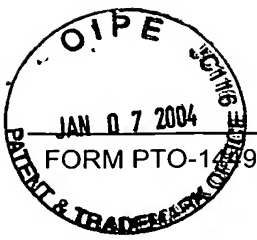
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	6,043,677	3/2000	Albu et al.	326	39	
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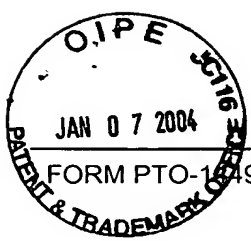
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	6,320,469	11/2001	Friedberg et al.	331	1A	
	6,373,278	4/2002	Sung et al.	326	38	
	6,411,150	6/2002	Williams	327	281	
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